

28-0014

GSM REMOTE CAMERA

User Manual

Manual version 3.0

TUTA Series GSM Remote Camera

Thank you for purchasing the TUT A camera. This camera is a remote controlled image-capturing device consisting of a microphone, infrared lights and a high quality 300,000-pixel camera lens. The TUT A camera can capture images according to a pre-programmed remote command and then send it to your multimedia messaging (MMS) enabled mobile phone with color display, or to an e-mail address. You can control and change the camera settings via SMS command.

The MMS sent by the TUT A camera can be viewed on your mobile phone. You also can opt to view a slide of consecutive photos taken by the GSM Remote camera.

The built-in high-light infrared LED allows the camera to capture clear images even in dark environment.

The TUTA camera is compatible with standard 433MHz wireless sensors such as PIR-, door magnet- and smoking sensors.

As soon as the wireless sensor triggers the camera alarm, you or your families and/or your guards can thus receive the alarm message via SMS, MMS or standard calls, according to the pre-programmed.

However, the camera can perform its duty well without any wireless sensor too. The TUTA has an integrated infrared body detector. It will therefore detect any unauthorized entry into your house and notify you via SMS, MMS, standard calls or E-mail.

All services and functions need to be supported by the GSM network and a SIM card.

This brochure suits for 28-001 model.

Details of the functioning and advanced operation of this camera are described in this instruction manual.

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WARNING

1. Purchase a GSM SIM card (mobile phone card) from GSM network service and install it in the camera. This SIM card number is referred as TUTA camera number on this brochure.
2. The user needs to activate the MMS function and Caller ID Presentation function of SIM card, and deactivate PIN code of the SIM. Contact with GSM network service for support.
3. Change the original password at the beginning use. Be sure to keep the password and SIM card number secret. Do not disclose this information to anyone other than the authorized users in order to ensure your safety.

For your safety

- This product is a wireless signal transmission device. Keep it away from electronic equipment likely to interfere with the wireless signals, in order to avoid signals interference.
- Switch off your TUTA and mobile phone when entering areas marked "Explosive", "Might explode", "Closed wireless transceiver devices" etc.
- Do not cast this product in a fire, as this may cause the battery to explode.
- This product should only be operated from power approved by the product manufacturer. The use of any other types of power may damage the product.
- Keep the product and its accessories out of the children reach.

Exception clause

1. We operate on a policy of continuous development. We reserve the right to make changes and improvements to any of the products described in this document without prior notice.
2. For the latest product information, please visit: <http://www.i-tuta.com>. We don't guarantee for the document veracity, reliability or any content except regulate in proper laws. Including no guarantee for product suitable market or suitable area promise.
3. Use only this product according to the law. Respect one another's privacy. Neither monitor another's home nor private. We hold no responsibility for the illegal use of this product.
4. We hold no responsibility for any loss of data or income; or any special,

incidental, consequential or indirect damages howsoever caused.

5. The contents of this document are provided "as is". Except as required by applicable law, no warranties of any kind, either expressed or implied, including, but not limited to the accuracy, reliability or contents of this document. We reserve the right to revise this document or withdraw it at any time without prior notice.

Chapter 1 Structure instruction

1.1 Package contents

1. Remote camera		1 unit
2. Power adapter (5.5V/2A)		1 unit
3. Remote control		2 units
4. User manual	1	unit
5. Mounting bracket	1	set

1.2 Products features

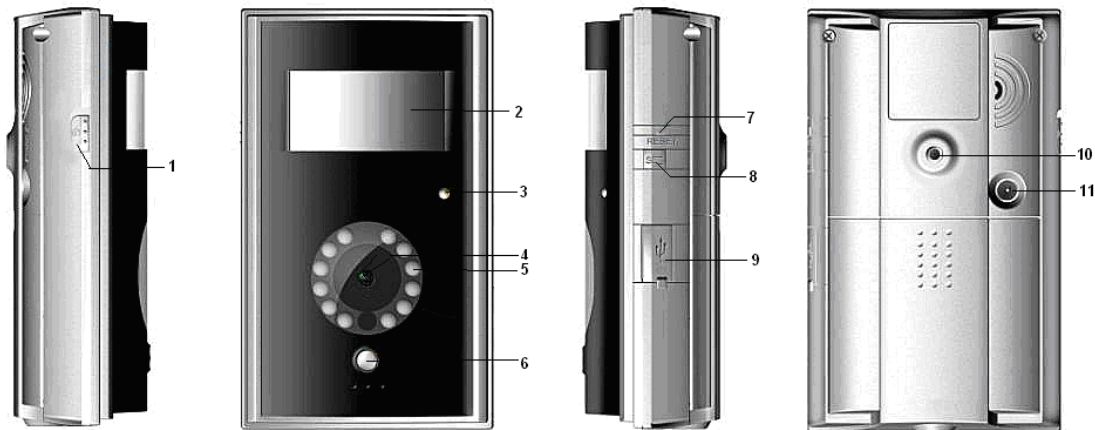
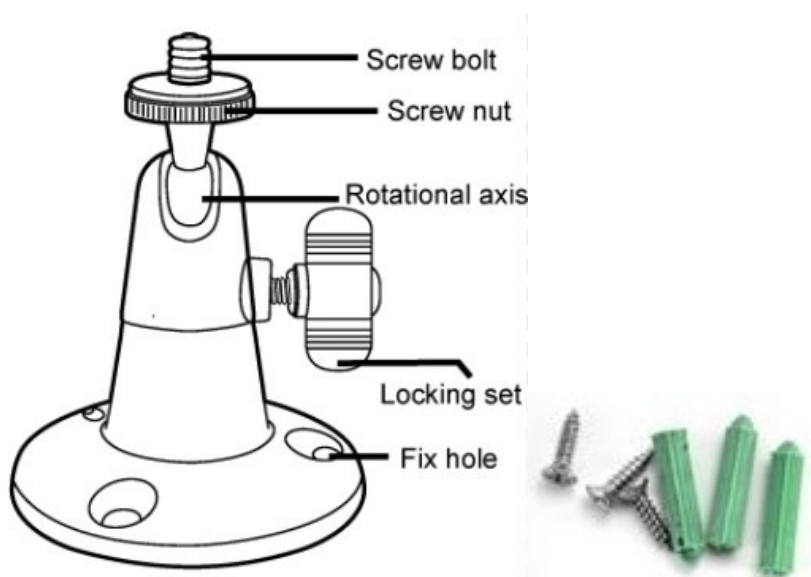


Figure 1: TUTA camera instructions

- | | |
|-----------------------------|---------------------------------------|
| 1. Power switch | 8. Set key |
| 2. Infrared body detector | 9. Mini USB (rubber cover) |
| 3. Indicator | 10. Hanging hole 1 |
| 4. Camera | 11. Power Interface |
| 5. Infrared lights (12 pcs) | 12. Back board (SIM card slot inside) |
| 6. Mirror and Microphone | 13. Hanging hole 2 |
| 7. Reset key | |

Tip: Keep the camera lens clean to insure best imaging quality.

1.3 Mounting bracket



1.4 Remote control instruction

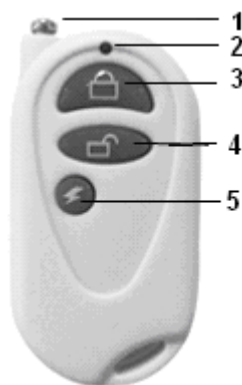


Figure 2: Remote control Instruction

- | | |
|-----------------------------|-----------------------------|
| 1. Antenna | 3. Arm the camera button |
| 2. Remote control indicator | 4. Disarm the camera button |
| 5. Emergency button | |

Battery: One 27A/12V battery.

Note: There is battery holder on the rear of the remote control. When this battery is running out of power, TUTA camera will emit "Beep, beep" warning tone and then send a SMS notification

message to **Master** user.

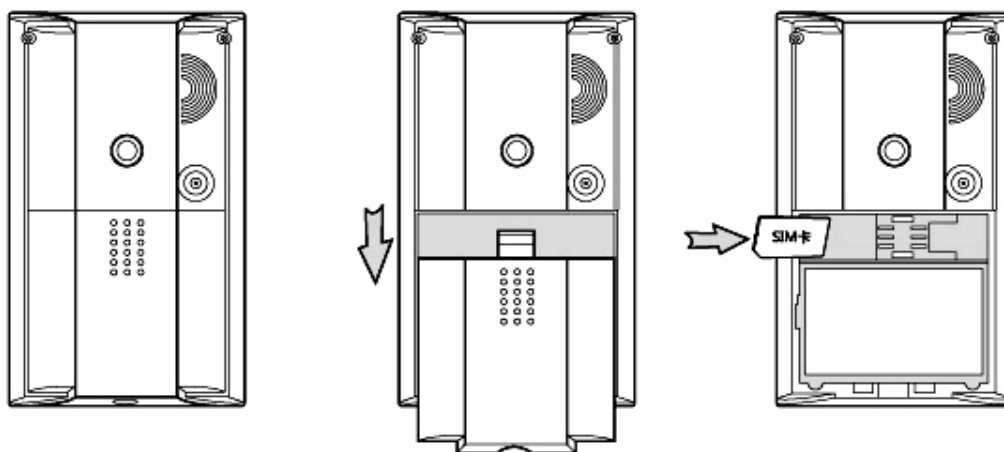
1.5 Light indicator

Color	Action	Status
Red	Flash slowly	Searching the network.
	Flash quickly	Sensor alarm, infrared body detector alarm.
	Constant Light	Not installed SIM card, or the remote camera damaged.
Green	Constant Light	Armed status.
	Flash twice per 2 seconds	Arming command received. TUT A camera will enter arming mode after 20 seconds.
		The camera is at the alarm-suspension situation.
	Flash slowly	Disarmed status.
	Flash quickly	Processing data.
	Light 2 seconds	Successfully reset factory setting, or loading sensor.
Orange	Flash	Loading remote control status.
Red and Green	Two color lights alternately	Loading sensor

Note: Slow flash 1 time per second, quick flash 2 times per second.

Chapter 2 Installation

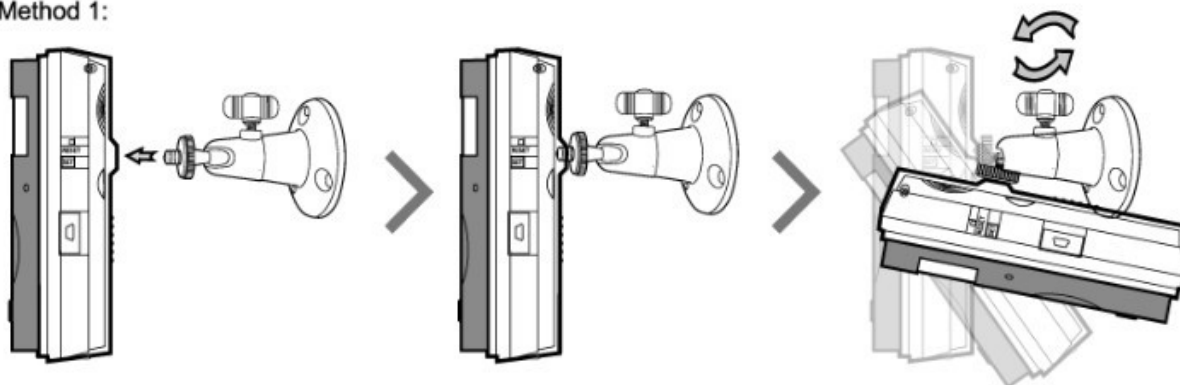
2.1 Install the SIM card



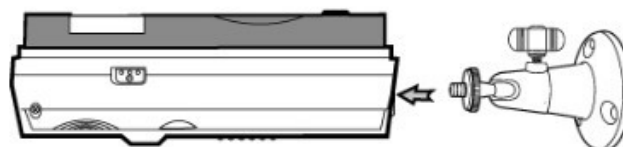
- Remove the back board from the rear of TUTA camera.
- Insert the SIM card into the slot.
- Get back the back board of TUTA camera.

2.2 Install the host mounting bracket

Method 1:



Method 2:



2.3 Connecting to power adapter

- Connect the adapter to an AC power , and connect the plug to the power interface of the TUTA camera .(See Figure 1 TUTA camera Instruction)
- This camera has a built-in rechargeable Lithium battery.
- The camera will notify the user when the power changes. For example, if the power adapter is disconnected or failure of the AC power occurs, TUTA camera will notify the user “External power cut. The device is operating on battery.”
- If TUTA camera is again connected to the external power, or the AC power is available again, the notification will be sent to the user, i.e.” The device is now resuming the use of external power source.”
- **Low battery:** The configure setting can not be saved when TUTA camera is operating on low battery.

2.4 Mounting the TUTA camera

TUTA camera can be mounted on a wall (vertically with the screws) or put down on any suitable horizontal surface.

How to choose the Installing place:

- In order to capture better image quality, avoid any areas where bright light will be irradiated directly into the lens of the camera on the camera.
- In order to avoid backlighting photography, it is suggested that the camera is located at the place where can look down the monitoring place with the minimum angle 30° .
- The GSM network's signal strength may affect the image, live voice quality and MMS transmission speed. Therefore, upon installation, the user should ensure that TUTA camera is located in an area with a strong network signal.
- After installation, the user should perform a test-run by taking several images and sending it to the user's mobile phone. This allows the user to check the image quality of the camera. The position of TUTA camera can then be adjusted until a satisfactory image quality level is reached.

2.5 Power on/ off

Power on:

Operation	Indicator light	Status
Turn the power switch to “On”	Red light is on for 3-5 seconds.	
	Red light flashing slowly for about	

position.	35 seconds.	
	A “Beep...” tone will be heard.	
	Green light flash slowly, or green light be on constantly.	TUTA camera is disarmed, or armed.

Power off:

Turn the power switch to downside “Off” position.

Chapter 3 Define the user and basic settings

3.1 User authorization level

There are three levels, each with a different authorization level, namely **Master**, **Families** and **Guest**.

Table 3.1 the difference in authority for Master, Families and Guests users:

User Type		Master	Families	Guests
Functions				
Change authority, password		YES	NO	NO
Automatic Alarm	Receive SMS	YES	NO	NO
	Receive MMS	YES	NO	NO
	Receive alarm calling	YES	YES	NO
	Get images by E-mail	YES	NO	NO
Emergency alarm	Receive SMS	YES	NO	NO
	Receive MMS	YES	NO	NO
	Receive emergency calling	YES	YES	NO
Call the camera to listen in live voice		YES	YES	NO
Get work status, images, help and instruction by sending SMS command		YES	YES	YES(Password)
Get images by E-mail		YES	YES	NO
Set remote camera by SMS command		YES	YES	NO
Add, modify or delete sensor		YES	YES	NO
Camera language setting		YES	NO	NO
Set infrared body detect function		YES	YES	NO

 Note

- Any MMS enabled mobile phone can receive the images captured by TUTA camera by sending SMS command with password.
- Any SMS enabled mobile phone can control TUTA camera with the password command.

All the settings of TUTA camera can be set or adjusted via a SMS command.

About the SMS Command:

- 1) **Master** and **families** users' SMS command format: #code#content#.
- 2) **Guest** users' SMS command format: #code#password#content#.
- 3) The password must be a four-digit number.
- 4) The original password is 1234.
- 5) The maximum digits that are allowed for the phone number is sixteen.
- 6) TUTA camera will reply to the user after it receives the SMS command.

Note

- The “#” symbol must not be ignored when typing an SMS command.
- No allow any space within the commands.

3.2 Setup master number

Master user has all the rights of changing camera settings and receives alarm messages from camera. In order to enable all the functions on the camera, the **Master** user must store his/ her mobile number in the camera's memory. Only one **Master's** mobile number (**Master** number) is allowed for a camera.

3.2.1 Add a master number to the camera

Authority: **Master** user.

Description

If TUTA camera is being used for the first time, or TUTA camera has been reset, the master user's number must be programmed into the camera, in order to ensure activation. The following methods can be used:

Method

The user must edit and send the following SMS (text message) to camera from mobile phone (the phone number will be the **Master** number) to:

Setup master number: #00# *SIMnumber*# (1)

The ***SIMnumber*** is the camera installed SIM card number, it need to add country code in front of the SIM number, for example #00#+49123456789# (+49 is the

country code of Germany, 123456789 is SIM number).

If the camera reply master number already exists, please refer the Reset Factory Setting parts to delete old master number.

3.2.2 Change the master number

Master user sends following SMS message in order to:

Change the master user's number: #14#NewMasterNumber# (2)

3.2.3 Change password

In order to ensure your privacy and safety during the use of this camera, change the password once start to use TUTA camera.

Master user sends following SMS message to:

Change the password: #04#oldpassword#newpassword# (3)

- The *password* is a four digit number.
- The original *password* is 1234.

3.3 Define family user

Family users have the authority to listen in on the camera, receive images, load the sensors and remote controls to the camera, and receive notification when the integrated infrared body detector be triggered. The **family** user's mobile numbers are set by the **Master** user. The **family** users should remember and safeguard the camera's SIM number.

3.3.1 Add a family number

Master user sends following SMS message in order to:

Add a family number: #06#FamilyNumber# (4)

Add several family numbers: #06#FamilyNumber#...#FamilyNumber# (5)

- Up to 10 *family* users' number can be stored on one camera.

3.3.2 Delete family number

Master user sends following SMS message in order to:

Delete a family number: #113#FamilyNumber# (6)

Delete several family numbers simultaneously: (7)

#113#FamilyNumber#...#FamilyNumber#

Delete all family numbers: #113# (8)

3.4 Define Guest user

Any selected person can operate in the **Guest** category if they know the password and the SIM number. The **Guest** user(s) can then use their mobile phones to send a SMS command including password to TUTA camera in order to obtain an MMS image.

3.5 Network parameter settings

Normally the camera will preset local operator MMS settings on the firmware. Users needn't to setup the MMS parameters. But if the GSM operator changes the MMS parameters or the local MMS settings do not preset on the firmware, users will receive SMS when they request MMS images: Sorry, the network is busy, MMS sending failed.

Master number can setup the MMS parameters manually by following method.

Six MMS parameters be requested on the camera. **Master** user send two SMS commands to the camera as follow.

Set MMS center: #124#MMScenter# (9)

Set APN parameters: (10)

#125#Proxy IP#WAPProxyPort#HTTPProxyPort#APN#Username#Pssaword#

Check the current operative network parameter settings: #55# (11)

- The **MMScenter** should be the MMS center address of GSM provider.
- For example: #124#http://mmsc.monternet.com#

#125#10.0.0.172#9201#80#cmwap#wap#wap#

3.6 Camera language

Each camera supports two default languages, English and Spanish. The user can send following SMS command to switch language:

Spanish language: #127#0# (12)

English language(Default): #127#1# (13)

Chapter 4 Operations and settings

4.1 Call the camera to listen in

Master and **family** user calls TUTA camera after which it will answer automatically. The user can then listen in the live audio in the monitoring area. Only one line can be connected to TUTA camera at a time.

4.2 Capture images

Authority:

Master/ family / guest send SMS to the camera to get the MMS image or send the image(s) to an appointed mobile or E-mail address.

Master/ family member call the camera to get the images.

Master/ family send SMS command to the camera to send MMS image to an E-mail address (Need to pre-set E-mail address).

4.2.1 Capture images to mobile phone

Method 1:

- **Master** or **family** user calls the camera and hand up upon hearing the ringing tone (within 10 seconds).
- TUTA camera will reply SMS notification: "Image capturing request received. The camera is busy sending the MMS messages."
- The user will then receive the MMS message momentarily.

Method 2:

The user sends following SMS message in order to:

Capture one image and send to the user mobile:

For master and family users: #03# (14)

For guest users: #03# password# (15)

Capture images and send to the user mobile:

For **master** and **family** users: #03#ImageQuantity# (16)

For **guest** users: #03#Password#ImageQuantity# (17)

- **Image quantity** should be in the range of 1-8 when the image size is set at 160×128 or 320×240, be in 1-2 when 640×480. (Refer 4.4 image size setting.)
The default image size is 320×240(QVGA).

4.2.2 Capture images and send to user's E-mail address

This function should be supported by the local network provider. The E-mail address must be set at first. Each user number can set only one E-mail address to receive images. The user sends following SMS message in order to:

Setup/modify E-mail address: #108#EmailAddress# (18)

Capture image(s) and send to pre-set E-mail: #03#ImageQuantity#1# (19)

- **Image quantity** should be in the range of 1-8 when the image size is set at 160×128 or 320×240, be in 1-2 when 640×480. The default image size is 320×240(QVGA).

Enable timing sends MMS images: #115#1# (20)

Set time period to auto-send MMS image: (21)

#116#WorkDay#StartTime1#EndTime1#IntervalTime1#...#StartTime3#EndTime3#IntervalTime3#

Disable timing send MMS image: #115#0# (22)

- Max allow 3 periods per workday. Each period time should set by start time, end time and interval.
- **WorkDay**: one digit, the values lie in the range of “0” to “9”.

Value	Corresponding day
0	Sunday
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday
7	Everyday
8	Monday to Friday
9	Monday to Saturday

- **StartTime and EndTime:** Be consists of 4 digits (hh:mm) and works on a 24 hour clock. For example: 0000 means time 00:00(hh:mm), 2359 means time 23:59(hh:mm). The StartTime and EndTime should be in the same day , and the EndTime must be later than StartTime.
- **IntervalTime:** This consists of 2 or 3 digits and has values in the range of “10” to “480” minutes.

4.3 Arming or disarming TUTA camera

4.3.1 Arming TUTA camera

- When user arm the TUTA camera, the built-in infrared body detector (PIR) will start working and detecting body heat. TUTA camera will automatically send alarm message or making a phone call once it be triggered.
- TUTA camera has 20 seconds alarm-suspension period after it be armed. The

user can leave the camera place during this time to avoid misalarm.

Method 1:

The user sends following SMS message in order to:

Arming TUTA camera manually: #01# (23)

Method 2:

Press  on the remote control, whilst pointing it in the direction of TUTA camera. TUTA camera will emit a “Beep” tone, to indicate that arming TUTA camera is successfully. (Refer remote control instruction parts)

4.3.2 Camera alarm

Once the camera be triggered, the LED will flash fast in green, then turn red and flash fast. It will sending alarm SMS, MMS or make voice calling acc ording to the setting. After it finish alarm process, ca mera will enter 20 seconds alarm-suspension period and then it can alarm again.

4.3.3 Disarming TUTA camera

When user disarm the TUT A camera, all loaded wireless sensor, integrated infrared body detector could not work. But it can send alarm only when the  button on remote control is pressed.

Method 1:

The user sends following SMS message in order to:

Disarming TUTA camera manually: #02# (24)

Method 2:

Press the  button on the remote control, the camera will emit a BEEP tone and the indicator light will flashing green to show the TUTA disarm successfully. (Refer remote control instruction parts.)

4.3.4 Timed arming the camera

Master and family users send following SMS message in order to:

Enable timing arms the camera: #128#1# (25)

Set time period to arm the camera: (26)

#129#WorkDay#ArmTime1#DisarmTime1#...#ArmTime3#DisarmTime3#

Disable timing arm the camera: #128#0# (27)

- **WorkDay:** The value description is same with command 21.
- Up to 3 periods be allowed per workday . Each period time should set by

ArmTime, DisarmTime.

- **ArmTime and DisarmTime:** Be consists of 4 digit s (hh:mm) and works on a 24 hour clock. For example: 0000 m eans time 00:00(hh:mm), 2359 mean s time 23:59(hh:mm). The ArmTime and DisarmTime should be in the same day, and the DisarmTime must be later than ArmTime during the same period.

4.4 Emergency alarms

The user press the remote control emergency button  to make TUTA camera alarm. TUTA camera will stop any other operation once it receive emergency alarm signal, and start emergency alarm process. TUTA camera will dial the **Master** number not more than 3 times until someone answers. If, after 3 attempts, there is no answer, TUTA camera will automatically stop dialing and revert to its preset mode. **Master** can listen in the live audio by answering the call. (Refer remote control instruction parts.)

4.5 Remote control

4.5.1 Pairing remote control

Normally the remote control was paired in factory. if the remote camera can not work with TUTA camera, user should pair the remote control separately. A camera can pair up to 5 remote controls.

Camera indicator	Operations	Status
Green, flashing or constantly light.	1. Press and hold the Set key for 2 seconds	Indicator light turns to orange (Learning mode)
Orange, flashing	2. Press any button o n the remote control (with battery inside) to send a signal to TUTA.	TUTA will emit a “Beep” tone and indicator will turn green for 2S. (Added successfully.)
Orange, flashing	3. Repeat step2 to load another new remote control.	
Orange, flashing	4. Press the Set key to exit the learning mode or waiting for 15 seconds to auto-exit.	Indicator light turns green, flashing or constantly light. (Exit learning mode)

4.5.2 Remote control instruction

There are three buttons on the remote control:

Always-alarm mode: #196#SensorDescription# (32)

- **SensorDescription** is used for identify different sensors affiliated with each camera. It can be numbers and letters.
 - **SensorDescription** could be empty. For #05#, TUTA camera will name the sensors with Sensor and number such as : Sensor1, Sensor2, Sensor3. For #196#, TUTA camera will name the sensors with SOS and number such as SOS1, SOS2, SOS3.
 - Up to 9 characters can be included in the **SensorDescription**
 - Sensor alarm default only send SMS, if user want the camera sending SMS & MMS of this sensor alarm, it need to add * in front of sensor description, such as #05#*door#.
3. When TUTA camera received the SMS command, it will emit a BEEP tone and the indicator will flash red and green alternately. TUTA camera will then send a notification SMS to the user: Camera pairing sensor, activate sensor then wait for confirmation SMS.
 4. The user needs to make the sensor work and transmit signal to be studied by TUTA camera.
 5. When TUTA camera receives the sensor signal, it will emit a Beep tone and send a notification message via SMS: Sensor*** successfully paired.
 6. To exit the loading mode manually, press the **set** key of the camera, TUTA camera will emit a Beep tone and exit the loading mode.

4.7.2 Removing sensor

Master and **family** user sends following SMS message to TUTA camera:

Remove a sensor: #112#SensorDescription#...#SensorDescription# (33)

Remove all wireless sensors: #112# (34)

- **Sensor description** should be the existing sensor which the user wants to remove.

4.8 Image size setting

The **master** or **family** user sends following SMS message to TUTA camera in order to:

Change the image size: #32# value# (35)

- If the **value** is 1, the image size is 160 × 128(pixels). It's for a standard small screen mobile phone. The size of one MMS image file is 4K.
- If the **value** is 2, the image size is 320 × 240(QVGA default). The size of one MMS image file is 9K.

- If the **value** is 3, the image size is 640 × 480 (VGA). The size of one MMS image file is 33K.

4.9 Warning tone upon alarm triggering

TUTA camera will emit a Beep tone upon alarm activation. The **master** or **family** user sends following SMS message to TUTA camera in order to set:

Warning tone upon alarm triggering: #130#1# (36)

No warning tone upon alarm (Default): #130#0# (37)

4.10 SMS notification upon alarm triggering

The **master** or **family** user sends following SMS message to TUTA camera in order to set:

No SMS notification upon alarm triggering: #1 1#0# (38)

SMS notification upon alarm (Default): #11#1# (39)

4.11 Call notification upon alarm triggering

The **master** or **family** user sends following SMS message to TUTA camera in order to set:

No call notification upon alarm triggering(Default): #13#0# (40)

Call notification upon alarm: #13#1# (41)

TUTA camera will call the master and the family user 's numbers for not more than 3 times. If it is still no one answer s the call, TUTA camera will then exit dialing mode automatically.

4.12 Turn on/off LED indicator on the camera

If the LED indicator is on, it will display in different ways to show the working status. If it turns off, it can make TUTA camera private and avoid to be found easily.

The **Master** or **family** user sends following SMS message in order to:

Turn off indicator: #143#0# (42)

Turn on indicator(Default): #143#1# (43)

4.13 Check status

The user sends following SMS message in order to:

Check the present settings and work status of TUTA camera:

- For **master** and **family** users: #07# (44)

- For **guest** users: #07# password# (45)

4.14 Getting help

The user sends following SMS message in order to:

Getting normal command list via SMS:

- For **master** and **family** users: **#09#** (46)

- For **guest** users: **#09# password** (47)

4.15 Resetting the camera

User can reset the camera to factory setting if the user forgot the master number or camera do not work normally.

After reset factory setting, camera will delete all setting numbers and setting values, user need to setup master number from beginning.

Method 1: Reset via the camera

- Switch TUTA camera off. It must remain off for a minimum of 20 seconds.
- Press and hold the **Reset** button and then switch TUTA camera back on.
- The indicator light will be green for 2-4 seconds after which it will flash red.
- If the resetting of TUTA camera is successful, a “Beep ...” tone will be emitted.

Method 2: Reset via SMS command

The user sends following SMS message to TUTA camera in order to:

Reset the camera: #08#password (48)

Chapter 5 General Troubleshooting

No.	General Trouble	Possible Reason	Solution
1	Can't start camera (Indicator is working)	Other master is already set in the camera.	Recover to factory default setting.
2	All functions disable (Indicator is working)	Caller ID presentation or MMS functions of the SIM card do not active, insufficient fee of the SIM card.	Contact network provider to active SIM card function. Pay for the card.
3	Indicator constant light in red color.	Can't find or identify the SIM card.	SIM card no install properly: Power off the camera and check it again.
4	Camera didn't response of any operation.	TUTA camera work abnormally.	Switch off the power, check SIM card, or reset factory setting.
5	After starting the camera, indicator	Network signal weak or network busy.	Place the camera at other place with strong signal and

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No.	General Trouble	Possible Reason	Solution
	flashed in red color and can not turn to green.		try again.
		SIM card PIN code actives.	Close the PIN code.
		SIM card invalid.	Contact with local operator to check of it.
6	Remote control can't work. Or action slowly. Or control distance range shortened.	Camera low power.	Connect external power to recharge the battery.
		Remote control low power.	Change remote control battery.
		Two remote controls work simultaneously.	Try only one remote control.
7	Can't add new remote control or wireless sensor	The remote control or sensor already studies successfully.	Exit the loading status.
		The sensor quantity is already reaches its max number.	Delete old sensors before add new sensor.
		Didn't set master user number	Set master number before add sensor.
8	Can't start the camera after long time supply with the battery.	Battery runs out of power.	Connect the camera to external AC power and charge for at least one hour, then, restart camera.

Note: If the problem can't be solved with above guidelines, contact to your local distributor or after service center.

Chapter 6 Main technical parameters

Power adaptor	Input:	100V~240V/50Hz	Output: 5.5V DC
Operating temperature	-10	°C~+45°C	
Store temperature		-20°C~+60°C	
Relative humidity		10-90%,	without condensation
Working band		EGSM900,DCS1800 (GSM850,PCS1900 Optional)	
Communication protocols	GS	M PHASE 2/2+ (including data operation)	
Wireless sensor receiving code		ASK	
Wireless sensor receiving band		433MHz	
Max. wireless sensors		15 units	
Remote control receiving band		433MHz	
Effective distant of the remote control	6	meters (wide area)	
Image format	JPEG		
Image resolution	160	×128,QVGA320×240,VGA640×480	

Camera pixel	300K	pixel
Camera Shooting angel	68	degree
Best shooting distance at night	≤ 8 meters	
Detect distance of build-in PIR sensor	≤ 9 meters	
Listen in distance	≤ 6 meters	
Lithium battery (Inner)	800mAh	
Battery standby time	12	hours (Affected by network)

Appendix: SMS commands list

Category	Function	Command	User
Define the user	Add a master number to the camera	(1) <u>#00#+CountryCodeSIMNumber#</u>	Master
	Change the master user's number	(2) <u>#14#NewMasterNumber#</u>	Master
	Change the password	(3) <u>#04#oldpassword#newpassword#</u>	Master
	Add a family number	(4) <u>#06#FamilyNumber#</u>	Master
	Add several family numbers	(5) <u>#06#FamilyNumber#...#FamilyNumber#</u>	Master
	Delete a family number	(6) <u>#113#FamilyNumber#</u>	Master
	Delete several family numbers simultaneously	(7) <u>#113#FamilyNumber#...#FamilyNumber#</u>	Master
	Delete all family numbers	(8) <u>#113#</u>	Master
Network parameter settings	Set MMS center	(9) <u>#124#MMScenter#</u>	Master
	Set APN parameters	(10) <u>#125#ProxyIP#WAPProxyPort#HTTPProxyPort#APN#Username#Password#</u>	Master
	Check the current operative network parameter settings	(11) <u>#55#</u>	Master
Language setting	The user's first language (or Spanish) version	(12) <u>#127#0#</u>	Master
	English version	(13) <u>#127#1#</u>	Master
Capturing images	Capture one image and send to the user mobile	(14) <u>#03#</u>	Master Family
		(15) <u>#03#password#</u>	Guest
	Capture images and send to the user mobile	(16) <u>#03#ImageQuantity#</u>	Master Family
		(17) <u>#03#Password#ImageQuantity#</u>	Guest
	Setup/modify E-mail address	(18) <u>#108#EmailAddress#</u>	Master Family
	Capture image(s) and send to pre-set E-mail	(19) <u>#03#ImageQuantity#1#</u>	Master
Timing	Enable timing sends MMS	(20) <u>#115#1#</u>	Master

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Category	Function	Command	User
send images	images		
	Set time period to auto-send MMS image	(21) <u>#116#WorkDay#StartTime1#EndTime1#IntervalTime1#...#StartTime3#EndTime3#IntervalTime3#</u>	Master
	Disable timing send MMS image	(22) <u>#115#0#</u>	Master
Arming or disarming TUTA camera	Arming TUTA camera manually	(23) <u>#01#</u>	Master Family
	Disarming TUTA camera manually	(24) <u>#02#</u>	Master Family
	Enable timing arms the camera	(25) <u>#128#1#</u>	Master Family
	Set time period to arm the camera	(26) <u>#129#WorkDay#ArmTime1#DisarmTime1#...#ArmTime3#DisarmTime3#</u>	Master Family
	Disable timing arm the camera	(27) <u>#128#0#</u>	Master Family
Remote control	Remove all remote controls from the camera	(28) <u>#111#</u>	Master Family
Infrared body detector	Activate infrared body detector (default)	(29) <u>#118#1#</u>	Master Family
	Deactivate infrared body detector	(30) <u>#118#0#</u>	Master Family
Wireless sensor	Make TUTA camera enter loading mode and set corresponding alarm mode	(31) <u>#05#SensorDescription#</u>	Master Family
	Make TUTA camera enter loading “wireless panic button” mode	(32) <u>#196#PanicDescription#</u>	Master Family
	Remove a wireless sensor	(33) <u>#112#SensorDescription#...#SensorDescription#</u>	Master Family
	Remove all wireless sensors	(34) <u>#112#</u>	Master Family
Image	Image size	(35) <u>#32#value#</u>	Master Family
Alarm settings	Warning tone upon alarm triggering	(36) <u>#130#1#</u>	Master Family
	No warning tone upon alarm (Default)	(37) <u>#130#0#</u>	Master Family
	No SMS notification upon alarm	(38) <u>#11#0#</u>	Master Family
	SMS notification upon alarm (Default)	(39) <u>#11#1#</u>	Master Family

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Category	Function	Command	User
	No call notification upon alarm (Default)	(40) <u>#13#0#</u>	Master Family
	Call notification upon alarm	(41) <u>#13#1#</u>	Master Family
Indicator light	Turn off indicator light	(42) <u>#143#0#</u>	Master Family
	Turn on indicator light	(43) <u>#143#1#</u>	Master Family
Check status	Check the present settings and work status of the camera	(44) <u>#07#</u>	Master Family
		(45) <u>#07#password#</u>	Guest
Getting help	Getting normal command list via SMS	(46) <u>#09#</u>	Master Family
		(47) <u>#09#password#</u>	Guest
Resetting	Resetting the camera	(48) <u>#08#password#</u>	Master